What Is Claimed Is:

1   1.   A system of automated network device discovery,

2 comprising:

3   a storage device; and

4   a discovery module, configured to issue a series of relayed

5   single-destination   simple   network   management

6   protocol (SNMP) requests to a plurality of network

7   devices to acquire a plurality of Cisco discovery

8   protocol (CDP) neighbor device data, generate a

9   plurality of network device inventory records

10   corresponding to the CDP neighbor device data, and

11   store the network device inventory records to the

12   storage device.

1   2.   The system of claim 1 wherein the discovery module

2 further stores the CDP neighbor device data which is newly

3 discovered to a queue and pops the CDP neighbor device data out

4 of the queue for successive CDP neighbor device discovery.

1   3. The system of claim 2 wherein the CDP neighbor device

2   identity is popped out of the queue on a first-in-first-out

3   (FIFO) basis.

1   4. The system of claim 1 further comprising a display

2   module, providing a graphical user interface (GUI) to facilitate

3   selecting and browsing the network device inventory records.

1   5. The system of claim 1 wherein the network device

2   stores a management interface base (MIB) file containing the CDP

3   neighbor device data.

1   6. The system of claim 2 wherein the network device

2   stores a management interface base (MIB) file containing the CDP

3   neighbor device data.

1   7. The system of claim 3 wherein the network device

2   stores a management interface base (MIB) file containing the CDP

3   neighbor device data.

1   8. A method of automated network device discovery, the

2   method comprising using a computer to perform the steps of:

3   issuing a series of relayed single-destination simple

4   network management protocol (SNMP) requests to a

5   plurality of network devices to acquire a plurality

6   of Cisco discovery protocol (CDP) neighbor device

7   data; and

8   generating a plurality of network device inventory records

9   corresponding to the CDP neighbor data.

1   9.   The method of claim 8 wherein the CDP neighbor device

2   data is stored in a queue and popped out of the queue for

3   successive CDP neighbor device discovery.

1   10.   The method of Claim 9 wherein the CDP neighbor device

2   data is popped out of the queue on a first-in-first-out (FIFO)

3   basis.

1   11.   The method of claim 8 wherein the CDP neighbor device

2   data is stored by a management interface base (MIB) file in the

3   network device.

1   12.   The method of claim 9 wherein the CDP neighbor device

2   data is stored by a management interface base (MIB) file in the

3   network device.

1   13.   The method of claim 10 wherein the CDP neighbor device

2   data is stored by a management interface base (MIB) file in the

3   network device.

1   14.   A machine-readable storage medium for storing a

2   computer program which when executed performs a method of

3   automated network device discovery, the method comprising the

4   steps of:

5   issuing a series of relayed single-destination simple

6   network management protocol (SNMP) requests to a

7   plurality of network devices to acquire a plurality

8   of Cisco discovery protocol (CDP) neighbor device

9   data; and

10   generating a plurality of network device inventory records

11   corresponding to the CDP neighbor data.

1   15.   The machine-readable storage medium of claim 14

2   wherein the CDP neighbor device data is stored in a queue and

3   popped out of the queue for successive CDP neighbor device

4   discovery.

1   16.   The machine-readable storage medium of claim 15

2   wherein the CDP neighbor device data is popped out of the queue

3   on a first-in-first-out (FIFO) basis.

1   17.   The machine-readable storage medium of claim 14

2   wherein the CDP neighbor device data is stored by a management

3   interface base (MIB) file in the network device.

1   18.   The machine-readable storage medium of claim 15.

2   wherein the CDP neighbor device data is stored by a management

3   interface base (MIB) file in the network device.

1   19.   The machine-readable storage medium of claim 16

2   wherein the CDP neighbor device data is stored by a management

3   interface base (MIB) file in the network device.